

JOURNAL OF

Ultrastructure Research

Editor

FRITIOF S. SJÖSTRAND

Editorial Board

U. AEBI • B. AFZELIUS • J. ANDRÉ • B. BACCETTI • G. F. BAHR • A. BAIRATI • R. F. BAKER
T. S. BAKER • L. BARAJAS

R. J. BARNETT • P. BAUDHUIN • S. R. BAWA • S. BULLIVANT

D. CARLSTRÖM • P. CASSIER

A. CLAUDE • A. I. COHEN • V. E. COSSLETT • W. Th. DAEMS • A. J. DALTON • M. DVOŘÁK

R. M. EAKIN • F. A. EISERLING

R. EKHOLM • K. ESAU • J. FARRANT • A. FREY-WYSSLING • L. L. HOEFERT • R. W. HORNE

S. INOUÉ • E. KELLENBERGER • A. L. LEHNINGER • J. H. LUFT • A. G. MATOLTSY

A. MAUNSBACH • R. K. MISHRA • L. PACKER • E. PAGE • S. L. PALAY • D. C. PEASE • D. R. PITELKA

J. B. LE POOLE • E. PUVION • J. T. RANDALL • J. F. REGER • E. J. REITH • J. P. REVEL

RHODIN • H. RIS • D. C. ROGERS • G. E. ROGERS • E. RUSKA • B. SATIR • J. SCHRÉVEL • A. P. SOMLYO • W. STELL

H. THEORELL • E. VIVIER • E. R. WEIBEL • R. S. WEINSTEIN • W. G. WHALEY • R. W. G. WYCKOFF

Volume 77

1981



ACADEMIC PRESS, INC., PUBLISHERS, NEW YORK AND LONDON

A Subsidiary of Harcourt Brace Jovanovich, Publishers

Copyright © 1981 by Academic Press, Inc.

All rights reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (21 Congress Street, Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1980 articles are the same as those shown for current articles.

MADE IN THE UNITED STATES OF AMERICA

Contents of Volume 77

NUMBER 1, OCTOBER 1981

A. H. MELCHER AND J. CHAN. Phagocytosis and Digestion of Collagen by Gingival Fibroblasts <i>in Vivo</i> : A Study of Serial Sections	1
MAKOTO FUKUMOTO. The Spermatozoa and Spermiogenesis of <i>Perophora formosana</i> (Ascidia) with Special Reference to the Striated Apical Structure and the Filamentous Structures in the Mitochondrion	37
NANCY J. LANE. Evidence for Two Separate Categories of Junctional Particle during the Concurrent Formation of Tight and Gap Junctions	54
MASSIMO DERENZINI, ANNALISA PESSON-BRIZZI, AND FRANCESCO NOVELLO. Relationship between Ribonucleoprotein Particles Containing Heterogeneous RNA and Ultrastructure and Function of Chromatin in Purified Rat Hepatocyte Nuclei	66
MARIE-JOSEPHE PÉBUSQUE AND RAYMOND SEÏTE. Evidence of a Circadian Rhythm in Nucleolar Components of Rat Superior Cervical Ganglion Neurons with Particular Reference to the Fibrillar Centers: An Ultrastructural and Stereological Analysis	83
GIOVANNI P. MARTELLI AND MARCELLO RUSSO. The Fine Structure of <i>Cymbidium</i> Ringspot Virus in Host Tissues. I. Electron Microscopy of Systemic Infections ...	93
MARCELLO RUSSO AND GIOVANNI P. MARTELLI. The Fine Structure of <i>Cymbidium</i> Ringspot Virus in Host Tissues. II. Light and Electron Microscopy of Localized Infections	105

NUMBER 2, NOVEMBER 1981

YOSHIHIRO TOH. Fine Structure of Sense Organs on the Antennal Pedicel and Scape of the Male Cockroach, <i>Periplaneta americana</i>	119
J. F. HAROLD SMITH, PETER B. CANHAM, AND JOHN STARKEY. Orientation of Collagen in the Tunica Adventitia of the Human Cerebral Artery Measured with Polarized Light and the Universal Stage	133
M. E. MARSH, R. D. SUMMERALL, AND R. L. SASS. Lysosomes and the Modulation of Cell Morphology in the Isthmus Region of the Outer Mantle Epithelium in the Estuarine Clam, <i>Rangia cuneata</i>	146
N. J. SEVERS, R. C. WARREN, AND S. H. BARNES. Analysis of Membrane Structure in the Transitional Epithelium of Rat Urinary Bladder. 3. Localization of Cholesterol Using Filipin and Digitonin	160
JOHN T. HANSEN. Chemoreceptor Nerve and Type A Glomus Cell Activity following Hypoxia, Hypercapnia, or Anoxia: A Morphological Study in the Rat Carotid Body	189
ALAN H. TIMME. The Ultrastructure of the Erythrocyte Cytoskeleton at Neutral and Reduced pH	199
MARGIT PAVELKA AND ADOLF ELLINGER. Morphological and Cytochemical Studies on the Golgi Apparatus of Rat Jejunal Absorptive Cells	210

WOJCIECH WITALIŃSKI AND LUCYNA GONIAKOWSKA-WITALIŃSKA. Atypical Mitochondria in the Lung of Newts, <i>Triturus alpestris</i> , Laur.	223
---	-----

ERRATUM

Volume 73, Number 1, October 1980: "Abstracts of the Thirty-third Annual Meeting of the Scandinavian Society for Electron Microscopy," pp. 91-133	232
---	-----

NUMBER 3, DECEMBER 1981

PETER R. BRINK, MAYNARD M. DEWEY, DAVID E. COLFLESH, AND ROBERT W. KENSLER. Polymorphic Nexuses in the Earthworm <i>Lumbricus terrestris</i>	233
EDWARD C. CARLSON AND DAVE HINDS. Native Banded Collagen Fibrils in the Glomerular Mesangial Matrix of Normal Human and Laboratory Animals	241
DORIS PREUS, ROSS JOHNSON, AND JUDSON SHERIDAN. Gap Junctions between Novikoff Hepatoma Cells following Dissociation and Recovery in the Absence of Cell Contact	248
DORIS PREUS, ROSS JOHNSON, JUDSON SHERIDAN, AND RITA MEYER. Analysis of Gap Junctions and Formation Plaques between Reaggregating Novikoff Hepatoma Cells	263
E. JOAN BLANCHETTE-MACKIE AND ROBERT O. SCOW. Membrane Continuities within Cells and Intercellular Contacts in White Adipose Tissue of Young Rats	277
E. JOAN BLANCHETTE-MACKIE AND ROBERT O. SCOW. Lipolysis and Lamellar Structures in White Adipose Tissue of Young Rats: Lipid Movement in Membranes	295
J. G. FOURNIER, A. PRIVAT, AND M. BOUTEILLE. Structural Changes in the Cell Nucleus during Measles Virus Infection in Cerebellar Explants	319
TOSHISUKE HIRAOKA, AIKO WADA, AND YOSHIKO TAKADA. Intranuclear Cytoplasmic Canal System in the Oosphere Nucleus of <i>Cycas revoluta</i> : An Evidence of Nucleocytoplasmic Interaction	329
URSULA I. HEINE, JORMA KESKI-OJA, AND BRUCE WETZEL. Rapid Membrane Changes in Mouse Epithelial Cells after Exposure to Epidermal Growth Factor	335
ANDRZEJ LOESCH. The Neurosecretory Axons in the Neurohypophysis of the Rat: An Electron Microscopic Study	344
CH. BUENO, P. NAVAS, J. AIJON, AND J. L. LOPEZ-CAMPOS. Glycoconjugates in the Epidermis of <i>Pleurodeles waltlii</i>	354
ROBERTO MONTESANO, PIERRE DIDIER, AND LELIO ORCI. The Ciliary Junction: A Unique Membrane Specialization in the Ciliate, <i>Glaucoma ferox</i>	360
MARK E. STEARNS AND DAVID L. BROWN. Microtubule Organizing Centers (MTOCs) of the Alga <i>Polytomella</i> Exert Spatial Control over Microtubule Initiation <i>in Vivo</i> and <i>in Vitro</i>	366
LUCIANO BARAJAS, PATRICIA WANG, KENNETH POWERS, AND SUSAN NISHIO. Identification of Renal Neuroeffector Junctions by Electron Microscopy of Re-embedded Light Microscopic Autoradiograms of Semithin Sections	379
AUTHOR INDEX FOR VOLUME 77	386
CUMULATIVE SUBJECT INDEX FOR VOLUMES 74-77	387